

Amendment filed May 6, 2005

Reply to Office Action of February 7, 2005

IN THE CLAIMS

11-13 (Canceled).

14. (Currently Amended) A gas turbine according to claim 1, in which a rotor shaft comprises a plurality of discs each having a plurality of moving blades arranged annularly on a peripheral portion, and spacers arranged between said discs, said respective discs and spacers being arranged in an axial direction in turn, comprising:

gap portions formed between rotor axis side regions of said discs facing said spacers and adjacent spacers;

a supply flow path for supplying refrigerant for cooling to said moving blades and a recovery flow path for recovering heated refrigerant, each of said supply and recovery flow paths being provided in said rotor shaft; and

a flow path for introducing fluid into said gap portions, provided in said discs; and

wherein said recovery flow path is arranged on a more radially outer side than said supply flow path, and

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wherein said flow path for introducing fluid into said gap portion is arranged on a more radially inner side than said supply flow path.

15. (Canceled)

16. (Currently Amended) A gas turbine according to claim 1, in which a rotor shaft comprises a plurality of discs each having a plurality of moving blades arranged annularly on a peripheral portion, and spacers arranged between said discs, said respective discs and spacers being arranged in an axial direction in turn, comprising:

gap portions formed between rotor axis side regions of said discs facing said spacers and adjacent spacers;

a supply flow path for supplying refrigerant for cooling to said moving blades and a recovery flow path for recovering heated refrigerant, each of said supply and recovery flow paths being provided in said rotor shaft; and

a flow path for introducing fluid into said gap portions, provided in said discs; and

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wherein said recovery flow path is arranged on a more radially outer side than said supply flow path, and
wherein the fluid introduced into said gap portions is exhausted therefrom into a gas flow path of said gas turbine.

17. (New) A gas turbine in which a rotor shaft comprises a plurality of discs each having a plurality of moving blades arranged annularly on a peripheral portion, and spacers arranged between said discs, said respective discs and spacers being arranged in an axial direction in turn, comprising:

gap portions formed between rotor axis side regions of said discs facing said spacers and adjacent spacers;

a supply flow path for supplying steam for cooling to said moving blades and a recovery flow path for recovering heated steam, each of said supply and recovery flow paths being provided in said rotor shaft; and

a flow path for introducing fluid into said gap portions, provided in said discs; and

wherein said recovery flow path is arranged on a more radially outer side than said supply flow path, and

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said flow path for introducing fluid into said gap portion is arranged on a more radially inner side than said supply flow path.

18. (New) A gas turbine in which a rotor shaft comprises a plurality of discs each having a plurality of moving blades arranged annularly on a peripheral portion, and spacers arranged between said discs, said respective discs and spacers being arranged in an axial direction in turn, comprising:

gap portions formed between rotor axis side regions of said discs facing said spacers and adjacent spacers;

a supply flow path for supplying steam for cooling to said moving blades and a recovery flow path for recovering heated steam, each of said supply and recovery flow paths being provided in said rotor shaft; and

a flow path for introducing fluid into said gap portions, provided in said discs; and

wherein said flow path for introducing fluid into said gap portion is constructed so as to be supplied with air extracted from a compressor, and arranged on a more radially inner side than said supply flow path,

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 said recovery flow path is arranged on a more radially

outer side than said supply flow path; and

 said flow path for introducing fluid into said gap
portion is arranged on a more radially inner side than said
supply flow path.